

COPY**DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

PULSED WRITE TECHNIQUES FOR MAGNETO-RESISTIVE MEMORIES

The specification of which

(check one) _____ is attached hereto
 was filed on August 14, 2000 as
 Application Serial No. 09/638,637
 and was amended on _____
 (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).*

I hereby claim foreign priority benefits under Title 35, United States Code §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)	PriorityClaimed			
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status)	(patented, pending, abandoned)
--------------------------	---------------	----------	--------------------------------

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: KRIS T. FREDRICK (Reg. No. 42,554) JOHN G. SHUDY, JR. (Reg. No. 31,214), IAN D. MACKINNON (Reg. No. 34,660). Address all telephone calls to KRIS T. FREDRICK at telephone number (612) 951-6029.

Address all correspondence to Kris T. Fredrick, Customer Number 000128

BEST AVAILABLE COPY

COPY

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole
or First Inventor Richard W. Swanson

Inventor's Signature Richard Swanson Date 1-7, 2001

Residence Zimmerman, Sherburne County, Minnesota

Citizenship USA

Post Office Address 26620 143rd Street N.W., Zimmerman, MN 55398

Full Name of Sole
or First Inventor William J. Johnson

Inventor's Signature William J. Johnson Date 4-29, 2001

Residence Hopkins/Hennepin County, Minnesota

Citizenship USA

Post Office Address 21 Wayside Road
Hopkins, MN 55343

Full Name of Sole
or First Inventor Theodore Zhu

Inventor's Signature Theodore Zhu Date 4/20, 2001

Residence Maple Grove, Hennepin County, Minnesota

Citizenship USA

Post Office Address 6257 Quantico Lane
Maple Grove, MN 55311

Full Name of Sole
or First Inventor Anthony S. Arrott

Inventor's Signature Anthony S. Arrott Date 4/20, 2001

Residence Washington, D.C., District of Columbia

Citizenship USA

Post Office Address 5026 Reno Road
Washington, D.C. 20008

*Title 37, Code of Federal Regulations §1.56:

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim

BEST AVAILABLE COPY

COPY

is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.
- A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.
- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
- (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

COPY

MICRON.173GEN

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	MICRON TECHNOLOGY, INC.)
App. No. :	listed below)
Filed :	listed below)
For :	listed below)
Examiner :	Unknown)

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION
AND
REVOCATION AND POWER OF ATTORNEY

United States Patent and Trademark Office
P.O. Box 2327
Arlington, VA 22202

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee") for the cases listed below. The original Assignment from Honeywell, Inc. to Micron Technology, Inc. is recorded at Reel 012188 and Frame 0697, and each of the listed cases was previously assigned of record to Honeywell, Inc.:

APP. No.	Our Ref. No.	Title	Patent No.	Assignment Reel/Frame
09/318,073	MICRON.196CP1	Local Shielding For Memory Cells	PENDING	009993/0887
09/618,237	MICRON.211A	Magneto-Resistive Memory Array	PENDING	011267/0257
09/618,256	MICRON.210A	Magneto-Resistive Memory Having Sense Amplifier With Offset Control	PENDING	011430/0400
09/618,492	MICRON.212A	Memory Redundancy With Programmable Non-Volatile Control	PENDING	011377/0194
09/618,504	MICRON.198A	MRAM Architectures For Increased Write Selectivity	PENDING	012188/0697
09/638,415	MICRON.213A	Magneto-Resistive Memory With Shared Wordline And	PENDING	011189/0647

BEST AVAILABLE COPY

COPY

App. No. : listed below
 Filed : listed below

App. No.	Our Ref. No.	Sense Line	Patent No.	Assignment Rec'd Date
09/638,419	MICRON.214A	Passivated Magneto-Resistive Bit Structure And Passivation Method Therefor	PENDING	011287/0078
09/638,637	MICRON.215A	Pulsed Write Techniques For Magneto-Resistive Memories	PENDING	011262/0993
09/668,922	MICRON.216A	Shielding Arrangement To Protect A Circuit From Stray Magnetic Fields	PENDING	011199/0931
08/962,512	MICRON.197A	Shielded Package For Magnetic Devices	5,939,772	9147/0852
08/993,009	MICRON.196A	Self-Aligned Wordline Keeper And Method Of Manufacture Therefor	5,956,267	8940/0969
08/962,518	MICRON.208A	MRAM Design To Reduce Dissimilar Nearest Neighbor Effects	5,982,658	9066/0083
08/940,587	MICRON.207A	Method To Permit High Temperature Assembly Processes For Magnetically Sensitive Devices	6,027,948	N/A
08/993,005	MICRON.209A	Method Of Manufacturing A High Density Magnetic Memory Device	6,048,739	8940/0979
09/365,308	MICRON.206A	Method And Apparatus For Reading A Magneto-Resistive Memory	6,134,138	010147/0942
09/396,189	MICRON.185DV1	Non-Volatile Storage Latch	6,147,922	9115/0907
09/429/664	MICRON.185CP1	Non-Volatile Storage Latch	6,175,525	010353/0253
09/455,850	MICRON.199A	Method And Apparatus For Writing Data States To Non-Volatile Storage Devices	6,178,111	010477/0485
09/059,871	MICRON.185A	Non-Volatile Storage Latch	6,269,027	9115/0907
06/879,679	MICRON.189A	Magneto-Resistive Memory Including Thin Film Storage Cells Having Tapered Ends	4,731,757	4574/0767
06/908,075	MICRON.187A	Differential Arrangement Magnetic Memory Cell	4,751,677	4604/0016
07/008,211	MICRON.195A	Vialess Shorting Bars For Magneto-Resistive Devices	4,754,431	4664/0251
06/870,068	MICRON.188A	Magneto-Resistive Memory With Multi-Layer Storage Cells Having Layer Of Limited	4,780,848	4559/0920

App. No. : listed below
Filed : listed below

COPY

App. No.	OIF Reg. No.	Title	Patent No.	Assignment Reel/Frame
07/078,612	MICRON.186A	Differential Magneto-Resistive Memory Sensing	4,829,476	4748/0535
07/168,293	MICRON.192DV1 MICRON.195DV1	Vialess Shorting Bars For Magneto-Resistive Devices	4,897,288	4664/0251
07/161,534	MICRON.194A	Magnetic Device Integrated Circuit Interconnection System	4,918,655	4838/0775
07/404,003	MICRON.203FW1	Semiconductor Device Housing With Magnetic Field Protection	4,953,002	4896/0504
07/504,777	MICRON.191A	Opposed Field Magneto-Resistive Memory Sensing	5,012,444	5269/0357
07/505,090	MICRON.190A	Magnetic State Entry Assurance	5,060,193	5275/0230
07/507,682	MICRON.193A	Inductively Sensed Magnetic Memory	5,064,499	5283/0794
08/061,603	MICRON.202A	Sense Amplifier Input Stage For Single Array Memory	5,349,302	6564/0073
08/365,852	MICRON.204A	Highly Producible Magneto-Resistive RAM Process	5,496,759	7300/0805
08/576,279	MICRON.205A	Integrated Spacer For Magneto-Resistive RAM	5,569,617	7822/0914
08/576,732	MICRON.200A	Magnetic Hardening Of Bit Edges Of Magneto-Resistive RAM	5,756,366	7807/0166

The original assignment from Honeywell, Inc. to Micron Technology, Inc. is recorded at Reel 012188 and Frame 0697. These assignments represents the entire chain of title of these inventions from the Inventors to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (949) 760-0404, Customer No. 20,995, and Michael L. Lynch, Reg. No. 30,871, Micron Technology, Inc., 8000 South Federal Way, P.O. Box 6, Boise, ID 83707-0006, as its attorneys

App. No. : listed below
Filed : listed below

COPY

with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use Customer No. 20,995 for all communications.

MICRON TECHNOLOGY, INC.

Dated: February 28, 2002

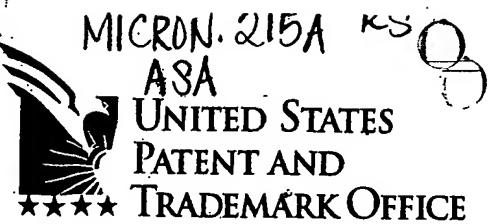
By: Roderic Lewis
Roderic Lewis

Vice President of Legal Affairs,
Title: General Counsel and Corporate Secretary

Address: 8000 South Federal Way
P.O. Box 6
Boise, ID 83707-0006

W:\DOCS\ASA\ASA-11329.DOC
021102

BEST AVAILABLE COPY



COPY

SEPTEMBER 25, 2002

PTAS

KNOBBE, MARTENS, OLSON & BEAR LLP
ADEEL S. AKHTAR
SIXTEENTH FLOOR
620 NEWPORT CENTER DRIVE
NEWPORT BEACH, CA 92660

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



102170832A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF
THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/24/2002

REEL/FRAME: 013118/0001
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARROTT, ANTHONY S.

DOC DATE: 07/18/2002

ASSIGNEE:

MICRON TECHNOLOGY, INC.
8000 SOUTH FEDERAL WAY
BOISE, IDAHO 83707-0006

SERIAL NUMBER: 09638637
PATENT NUMBER:

FILING DATE: 08/14/2000
ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

BEST AVAILABLE COPY

Client Code: MICRON.215A

07-29-2002

COPY

TO THE ASSISTANT COMMISSIONER FOI

102170832

documents or copy thereof.

1. Name of conveying party(ies): (If multiple assignors, list numerically)

Anthony S. Arrott

17/24/02

Additional name(s) of conveying party(ies) attached?
() Yes (X) No

2. Name and address of receiving party(ies):

Name: Micron Technology, Inc.
Internal Address:
Street Address: 8000 South Federal Way
City: Boise State: Idaho ZIP: 83707-0006

- Additional name(s) of receiving party(ies) attached?

() Yes (X) No

3. Nature of conveyance:

- (x) Assignment
() Merger
() Security Agreement
() Change of Name
() Other:

Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above) July 18, 2002

4. Application number(s) or Patent number(s):

- () Application(s) filed herewith Execution Date(s):

(X) Patent Application No.: 09/638,637
Filing Date: August 14, 2000

- () Patent No.:
Issue Date:

Additional numbers attached? () Yes (X) No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Adeel S. Akhtar
KNOBBE, MARTENS, OLSON & BEAR, LLP
Customer No. 20,995
Internal Address: Sixteenth Floor
Street Address: 620 Newport Center Drive
City: Newport Beach State: CA ZIP: 92660
Attorney's Docket No.: MICRON.215A

7. Total fee (37 CFR 1.21(h)): \$40.00

(X) Enclosed
0 Authorized to be charged to deposit account

8. Deposit account number: 11-1410

Please charge this account for any additional fees which may be required, or credit any overpayment to this account.

6. Total number of applications and patents involved: one
(1)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.

Adeel S. Akhtar
Name of Person Signing

Signature

Adeel S. Akhtar

Date

July 19, 2002

OFFICE OF PUBLIC RECORDS
JULY 24 2002
FINANCE SECTION
AM 8:06

41,394
Registration No.

Total number of pages including cover sheet, attachments and document: 3

Mail documents to be recorded with required cover sheet information to:

07/26/2002 DBYRNE 00000147 09638637

01 FC:581

40.00 OP

U.S. Patent and Trademark Office
Attn: Assignment Division
Crystal Gateway-4
1213 Jefferson Davis Highway, Suite 320
Arlington, VA 22202

BEST AVAILABLE COPY

Application No.: 09/638,637
Filing Date: August 14, 2000

COPY

PATENT
Client Code: MICRON.215A
Page 1

ASSIGNMENT

WHEREAS, I, Anthony S. Arrott, a citizen of the United States of America, residing at 5026 Reno Road, Washington, DC 20008, have invented certain new and useful improvements in a PULSED WRITE TECHNIQUES FOR MAGNETO-RESISTIVE MEMORIES for which an application for Letters Patent in the United States, Application No. 09/638,637 was filed on August 14, 2000;

AND WHEREAS, Micron Technology, Inc.,(hereinafter "ASSIGNEE"), a Delaware Corporation, with its principal place of business at 8000 South Federal Way, Boise, Idaho 83707-0006, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

I must point out that the above Letters Patent application was filed without my knowledge. It pertains to a discovery that I made after no longer being paid by Motorola, but using their facilities in September 1998. Possibly it should be considered public domain. The patent application is based on designs later developed while I was under contract to Honeywell, Inc, but firmly based on that previous discovery.

Nevertheless, in return for good and valuable consideration, the receipt of which is hereby acknowledged, I, the said inventor, to the extent that the patent should not properly be considered to be public domain, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument, again to the extent that the patent should not properly be considered to be public domain.

Nevertheless, I HEREBY covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 18th day of July, 2002.



Anthony S. Arrott

On July 18, 2002, before me, Attila Kakay, Anthony S. Arrott, personally known to me, executed the instrument.

RECEIVED IN THE OFFICE OF THE SECRETARY OF STATE

